Amendments to the Specification:

Please insert into Page 1, after line 7, of the original specification as filed the heading:

BRIEF SUMMARY OF THE INVENTION

Please insert into Page 6, after line 17, of the original specification as filed the heading:

BRIEF DESCRIPTION OF THE DRAWINGS

Please insert into Page 6, after line 32, of the original specification as filed the heading:

DETAILED DESCRIPTION OF THE INVENTION

Please replace the second paragraph of page 1 of the original specification as filed, beginning at line 9, with the following:

This object is achieved according to the invention by means of a method having the features in accordance with ~~patent claim 1~~ a method for determining the frequency response of an electrooptical component (60) within a predefined frequency band, in which optical pulses having a first optical carrier frequency and having a predefined pulse frequency (fp) are generated, the electrooptical component (60) is driven with an electrical measurement signal (Smeas) having a predefined measurement frequency (fmeas) in such a way that an optical output

signal (Sout) - modulated with the measurement frequency (fmeas) - having a predefined second optical carrier frequency is formed, the measurement frequency (fmeas) being an integral multiple of the pulse frequency (fp) plus a predefined frequency offset (Δf), the pulses and the output signal (Sout) are subjected to a joint frequency mixing and, from the mixed products formed during the frequency mixing, at least one mixed product (M") is detected whose modulation frequency corresponds to the predefined frequency offset (Δf), the frequency behavior of the electrooptical component (60) at the measurement frequency (fmeas) is determined on the basis of the intensity, in particular the power, the amplitude or the root-mean-square value, of the detected mixed product (M"), and the frequency behavior of the electrooptical component (60) is determined in the manner described for all measurement frequencies (fmeas) which correspond to an integral multiple of the pulse frequency (fp) plus the predefined frequency offset (Δf) and which lie within the predefined frequency band. Advantageous refinements of the method according to the invention are specified in subclaims.

Please replace the third paragraph of page 6 of the original specification as filed, beginning at line 10, with the following:

This object is achieved according to the invention by means of an arrangement having the features in accordance with ~~patent claim 20~~a method for determining the frequency response of an electrooptical component (60) within a predefined frequency band, in which optical pulses having a first optical carrier frequency and having a

predefined pulse frequency (fp) are generated, the electrooptical component (60) is driven with an electrical measurement signal (Smeas) having a predefined measurement frequency (fmeas) in such a way that an optical output signal (Sout) - modulated with the measurement frequency (fmeas) - having a predefined second optical carrier frequency is formed, the measurement frequency (fmeas) being an integral multiple of the pulse frequency (fp) plus a predefined frequency offset (Δf), the pulses and the output signal (Sout) are subjected to a joint frequency mixing and, from the mixed products formed during the frequency mixing, at least one mixed product (M") is detected whose modulation frequency corresponds to the predefined frequency offset (Δf), the frequency behavior of the electrooptical component (60) at the measurement frequency (fmeas) is determined on the basis of the intensity, in particular the power, the amplitude or the root-mean-square value, of the detected mixed product (M"), and the frequency behavior of the electrooptical component (60) is determined in the manner described for all measurement frequencies (fmeas) which correspond to an integral multiple of the pulse frequency (fp) plus the predefined frequency offset (Δf) and which lie within the predefined frequency band. The method is characterized in that the phase response of the electrooptical component (60) is additionally measured and in that the phase response of the optoelectrical transducer (400) is additionally measured.